	Application No.	Applicant(s)
	10/825,318	NARUSE ET AL.
Notice of Allowability	Examiner	Art Unit
	Hoan H. Tran	2852
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in or other appropriate comm GHTS. This application is a	n this application. If not included unication will be mailed in due course. THIS
1.   This communication is responsive to   amendment filed 12/0	<u>8/2005</u> .	
2. ☑ The allowed claim(s) is/are <u>1-19</u> .		
3. ☑ Acknowledgment is made of a claim for foreign priority una) ☑ All b) ☐ Some* c) ☐ None of the:		or (f).
Certified copies of the priority documents have  Certified copies of the priority documents have		an No
2. Certified copies of the priority documents have		
3. Copies of the certified copies of the priority doc	cuments have been receive	d in this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>		
5. CORRECTED DRAWINGS ( as "replacement sheets") must	t be submitted.	
(a) including changes required by the Notice of Draftsperso	on's Patent Drawing Review	w ( PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		
(b) including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment o	r in the Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the		
<ol> <li>DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F</li> </ol>		
	•	
Attachment(s)	5 🗖 Nation of Iv	formal Detect Application (DTO 450)
1. Notice of References Cited (PTO-892)		formal Patent Application (PTO-152)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413), /Mail Date .
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date</li> </ol>	8), 7. 🗌 Examiner's	/Mail Date Amendment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛭 Examiner's	Statement of Reasons for Allowance
	9. 🗌 Other	<b>_</b>

Art Unit: 2852

## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 1-19 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

Claims 1-16

None of the prior art of record teaches or suggests a cleaning apparatus comprising a blade chip having a rubber plate member and a reinforcing plate that are joined together; wherein the reinforcing plate member having first and second end planes, wherein when the blade chip is in original position, the first end plane is located a predetermined distance from the distal end of a supporting plate supporting the blade chip, and wherein when the blade chip is in a changed position, the second end plane is located at the predetermined distance from the distal end of the supporting plate.

Claim 17

None of the prior art of record teaches or suggests a cleaning apparatus comprising a blade chip having a rubber plate member and a reinforcing plate that are joined together; wherein the length between a distal end of the rubber plate member and a distal end of the reinforcing plate member is no more than the thickness of the rubber plate member.

Claim 18

None of the prior art of record teaches or suggests a cleaning apparatus comprising a blade chip having a rubber plate member and a reinforcing plate that are joined together, and a piezoelectric element disposed on a vibration plate for propagating vibration to the blade chip via

Art Unit: 2852

the vibration plate; wherein one or more notches are formed in a portion of the vibration plate other than a portion of the vibration plate on which the piezoelectric element is disposed.

Claim 19

None of the prior art of record teaches or suggests a cleaning apparatus comprising a blade chip having a rubber plate member and a reinforcing plate that are joined together, and a piezoelectric element disposed on a vibration plate for propagating vibration to the blade chip via the vibration plate; wherein the rubber plate member and the reinforcing plate member are joined together via an intermediary member disposed therebetween.

## Prior Art

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
  - Serizawa et al. [6,957,028] disclose a cleaning blade.
  - Yasutomi et al. [5,999,773] disclose a cleaning device.
  - Saitoh et al. [5,835,837] disclose a cleaning device.

## **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (571) 272-2141. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

Application/Control Number: 10/825,318 Page 4

Art Unit: 2852

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (571) 272-2136. The central office fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

HHT

Feb. 21, 2006

HOANTRAN PRIMARY EXAMINER



Approved W6 Or 2000

FIG.1

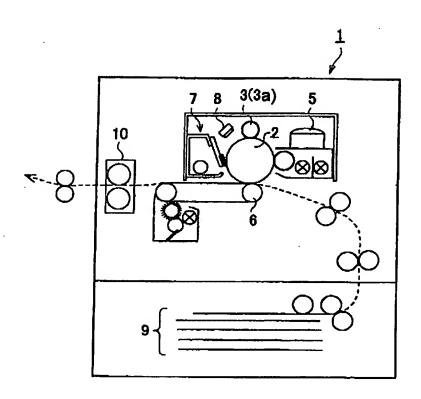


FIG.2

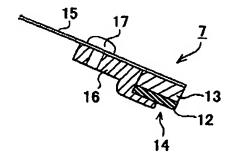




FIG.3

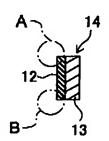


FIG.4

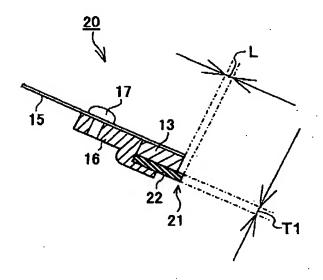




FIG.5

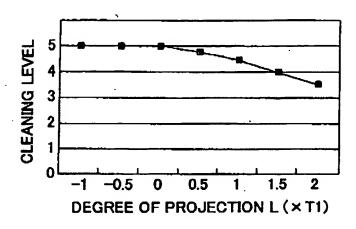
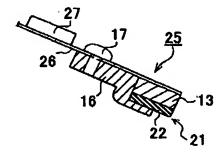


FIG.6





Appoul

FIG.7

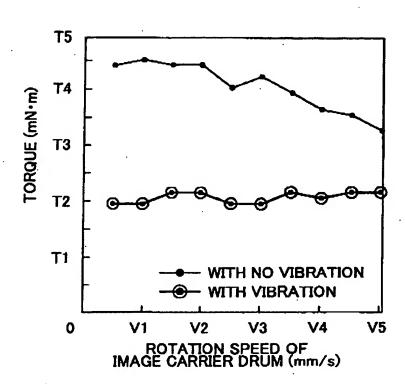
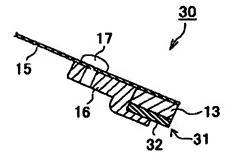


FIG.8





Approvid

FIG.9

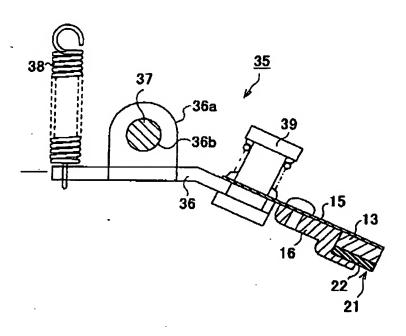


FIG.10

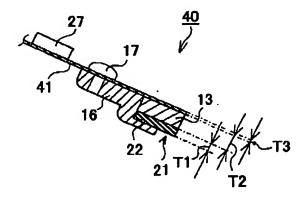




FIG.11

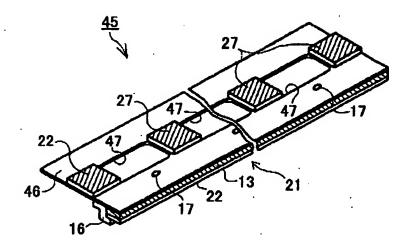


FIG.12

